

## **ABSTRACT OF THE DISCLOSURE**

An orbital machining apparatus for producing a workpiece hole with a cutting tool, including: a first actuator for rotating the tool about its longitudinal center axis during the machining of the hole; a second actuator for moving the tool in an axial feed direction substantially parallel to the tool axis; a third actuator for rotating the cutting tool about a principal axis; and a radial offset mechanism. The third actuator includes a rotating drive driven by a motor, a carrier ring connected to and rotated by the drive by two opposed, radial drive pins. The ring performs a radial sliding movement relative to the drive while being rotated thereby. Two opposed, radial carrier guide shafts circumferentially spaced 90° from the drive pins and connecting the ring and an inner cylindrical eccentric body such that the latter may perform a radial sliding movement relative to the ring while being rotated thereby.